

# PATENT ABSTRACTS OF JAPAN

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## (54) MULTI-CARRIER TRANSMISSION SYSTEM AND MULTI-CARRIER MODULATION METHOD

(57)Abstract:

**PROBLEM TO BE SOLVED:** To increase number of chips in the case of adopting an orthogonal frequency division multiplex OFDM/code division multiple access CDMA modulation system in a transmission line where frequency selective fading is in existence, enhance spread gain as a result, and increase a multiplex number even in the case of CDMA multiplexing.

**SOLUTION:** This multi-carrier transmission system adopting the OFDM/ CDMA modulation system, is provided with a serial/parallel S/P conversion section 4, that arranges a spread signal of a transmission data series two- dimensionally and regularly arranges the spread signal group of the transmission data series that are arranged two-dimensionally. Then a transmitter transmits a transmission signal generated by the S/P conversion section 4 in the unit of time base and a receiver demodulates a received signal to obtain the transmission data series.

